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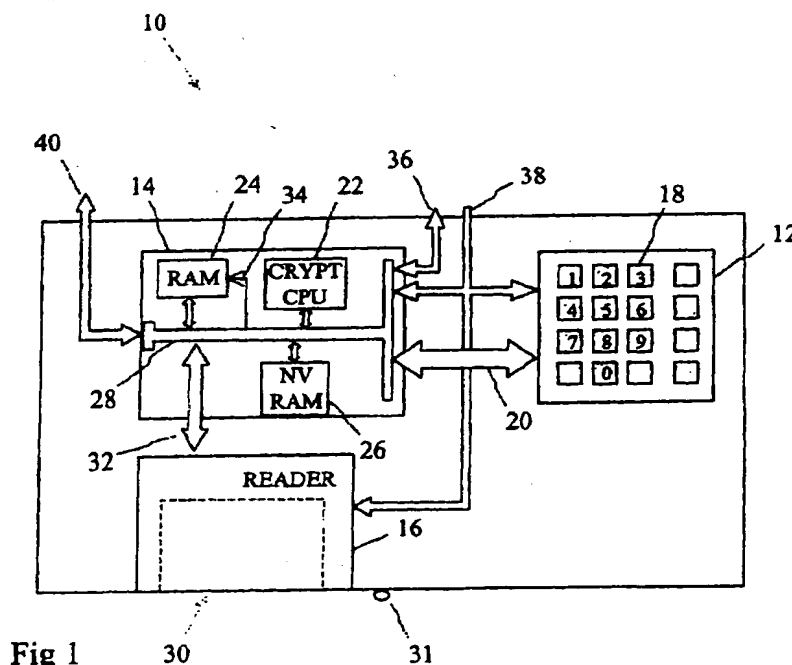
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(54) Encrypting keypad module

(57) An encrypting keypad module (10) comprising a keypad (12) and an encryption unit (14) is described. The module (10) includes a reader (16) (such as a Smart card reader) for receiving a removable secure device (50) (such as a Smart card). The keypad module (10) is operable to communicate with the Smart card (50) and

to receive secure data therefrom. This secure data may relate to a new PIN key, a new encryption algorithm for use with a PIN key, or such like. An encrypting keypad system, and a method of changing secure information stored in an encrypting keypad module, are also described.





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EUROPEAN SEARCH REPORT

Application Number
EP 01 30 2228

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 825 875 A (UGON) 20 October 1998 (1998-10-20)	1,3,5-8	G07F7/10
A	* column 1, line 47 - line 65 * * column 4, line 37 - column 6, line 48; figure 1 *	2,4	
X	US 5 815 577 A (CLARK) 29 September 1998 (1998-09-29)	1,6,8	
A	* column 4, line 23 - column 6, line 54 * * column 8, line 8 - column 9, line 22; figures 2,3,11 *	2-5,7	
X	US 4 731 842 A (SMITH) 15 March 1988 (1988-03-15)	1,4,6,8	
A	* column 1, line 44 - column 2, line 26 * * column 2, line 61 - column 8, line 43; figure 1 *	2,3,5,7	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G07F
A	US 4 438 824 A (MUELLER-SCHLOER) 27 March 1984 (1984-03-27) * column 5, line 31 - column 10, line 68; figures 1-6 *	1,6,8	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 January 2003	Examiner Rivero, C
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 01 30 2228

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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22-01-2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5825875 A	20-10-1998	FR 2725537 A1	12-04-1996
		AU 690324 B2	23-04-1998
		AU 3318795 A	16-05-1996
		BR 9504355 A	08-10-1996
		CA 2160223 A1	12-04-1996
		EP 0707290 A1	17-04-1996
		JP 8212066 A	20-08-1996
		KR 214817 B1	02-08-1999
		NO 954028 A	12-04-1996
US 5815577 A	29-09-1998	US 5517569 A	14-05-1996
		AU 6864298 A	29-09-1998
		CN 1301437 T	27-06-2001
		EP 0965195 A1	22-12-1999
		WO 9840983 A1	17-09-1998
		AU 691602 B2	21-05-1998
		AU 2190295 A	09-10-1995
		BR 9507114 A	02-09-1997
		CA 2185697 A1	28-09-1995
		EP 0750812 A1	02-01-1997
		JP 10500504 T	13-01-1998
		NZ 283566 A	19-12-1997
		WO 9526085 A1	28-09-1995
US 4731842 A	15-03-1988	GB 2168514 A	18-06-1986
		DE 3585439 D1	02-04-1992
		EP 0186981 A2	09-07-1986
		JP 61139878 A	27-06-1986
US 4438824 A	27-03-1984	AT 47497 T	15-11-1989
		DE 3279994 D1	23-11-1989
		EP 0063794 A2	03-11-1982
		EP 0304547 A2	01-03-1989

EPO FORM P-69

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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